THE NAUTILUS.

Vol. XVI.

APRIL, 1903.

No. 12.

MOLLUSKS OCCURRING IN SOUTHERN CALIFORNIA.

The following species, not heretofore made known as occurring in Southern California, have been detected in Los Angeles and elsewhere in this part of the State within the past two years. The large slug Limax maximus first observed in the southeasterly part of Los-Angeles, has been quite numerous. It is found in considerable abundance in many localities in the Walnut Grove Tract, including my own grounds. Its color eaused me to doubt its identity, so I sent specimens to Dr. Pilsbry. He referred them to the foregoing species with the comment, "that it was not the common form, but a melanistic variety which I have never seen from the East." Another slug determined by Dr. Pilsbry for Mr. Williamson is Limax flavus, occurring in Los Angeles, apparently rare as yet. In March, last year, I detected a few examples of Punctum conspectum Bland, on my lawn near the water faucet; some 9 or 10 specimens; these were named by Professor Dall. I have failed to find further examples after careful search. Vallonia pulchella, so exceedingly abundant on my grounds in August, 1900 (see the NAUTILUS, Vol. XIV, pp. 65-67) is now quite scarce.

Mr. Hemphill reports *Limax maximus* as occurring in San Diego in the nursery of the well known florist, Miss Kate O. Sessions of that city.

The appearance and disappearance of forms like V. pulchella and P. conspectum is not easily explained.

Helix aspersa became exceedingly abundant on my premises, so numerous as to be a pest; by persistent search it is now nearly ex-

terminated. The hunt will have to be kept up, else it will soon become as abundant as ever.

ROBT. E. C. STEARNS.

Los Angeles, Feb'y 24, 1903.

DESCRIPTIONS OF NEW JAPANESE LAND SHELLS.

BY H. A. PILSBRY AND Y. HIRASE.

Chloritis tosanus n. sp.

Shell umbilicate, depressed, the spire but slightly convex, very thin, uniform brown. Surface slightly glossy, closely set with short hairs arranged in regular oblique rows. Whorls $4\frac{3}{4}$, very convex, separated by a deeply excavated suture, the last whorl rounded peripherally and beneath. Aperture slightly oblique, rounded-lunate; peristome thin, acute and not expanded except at the columellar insertion, where it is widely dilated, partly covering the umbilicus. Alt. 10, diam. 17.5 mm.

Shinjo-mura, Tosa. Type no. 84415. A. N. S. P., from no. 1015 of Mr. Hirase's collection.

This species is the first *Chloritis* found in Shikoku. It is very like *C. perpunctatus*, but about twice the size. In *C. fragilis* the hairs are much more widely spaced. *C. hirasei* is far more widely umbilicate.

Eulota (Cælorus) cavitectum n. sp.

The shell resembles $E.\ cariconus$, but is larger, not quite so high, the umbilicus contracting more rapidly within. Brown; covered with oblique cuticular threads and small scales, the scales predominating on the last whorl and base. Whorls $6\frac{1}{3}$, slightly convex, the last strongly carinate at the periphery, a little convex beneath, descending rather deeply below the keel in front. The aperture is nearly horizontal, transversely oval. The peristome is brown, thin, the upper margin not expanded, lower margin reflexed, bearing a white tubercle on the inner margin. Alt. 5, diam. 10 mm.

Kochi, Tosa. Type no. 84416. A. N. S. P., from no. 1033 of Mr. Hirase's collection.

E. caviconus of western Kyushu is smaller, has more whorls, a well-like umbilicus, and finer sculpture, the cuticle of E. cavitectum